All-Things Flu

FluBytes June 15, 2006

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Key Points

Flu Partners Update: Seasonal Influenza

The Joint Commission on Accreditation of Healthcare Organizations announced the approval of an infection control standard that requires accredited organizations to offer influenza vaccinations to staff. The standard will become an accreditation requirement beginning January 1, 2007, for the Critical Access Hospital, Hospital and Long Term Care accreditation programs. The requirement will cover doctors, nurses, volunteers and independent practitioners who risk spreading the disease to patients and have close patient contact.

The new Joint Commission standard requires organizations to:

- Establish an annual influenza vaccination program that includes at least staff and licensed independent practitioners;
- Provide access to influenza vaccinations on-site;
- Educate staff and licensed independent practitioners about flu vaccination; non-vaccine control measures (such as the use of appropriate precautions); and diagnosis, transmission and potential impact of influenza;
- Annually evaluate vaccination rates and reasons for non-participation in the organization's immunization program; and
- Implement enhancements to the program to increase participation.

The agenda for the June 2006 ACIP meeting can be viewed at http://www.cdc.gov/nip/ACIP/agendas.htm. The meeting is June 29-30, 2006.

To date the 161B reassortant of the A/Wisconsin strain is growing well for all 3 manufacturers.

New article attached: "Safety of High Doses of Influenza Vaccine and Effect on Antibody Responses in Elderly Persons"

Flu Partners Update: Avian Influenza and Pandemic Preparedness

On June 7 the CDC released a Health Alert "Updated Interim Guidance for Laboratory Testing of Persons with Suspected Infection with Avian Influenza A (H5N1) Virus in the United States". I have attached the alert to this email.

MedImmune of Gaithersburg, Md., announced that clinical testing of its intranasal bird flu vaccine will begin soon under an agreement with the U.S. National Institutes of Health. Phase III testing has nearly been completed for children under five years of age. The company expects to file a supplemental biologics license application with the U.S. Food and Drug Administration in July. Approval could mean the product would become commercially available by the 2007-2008 flu season.

Surveillance update

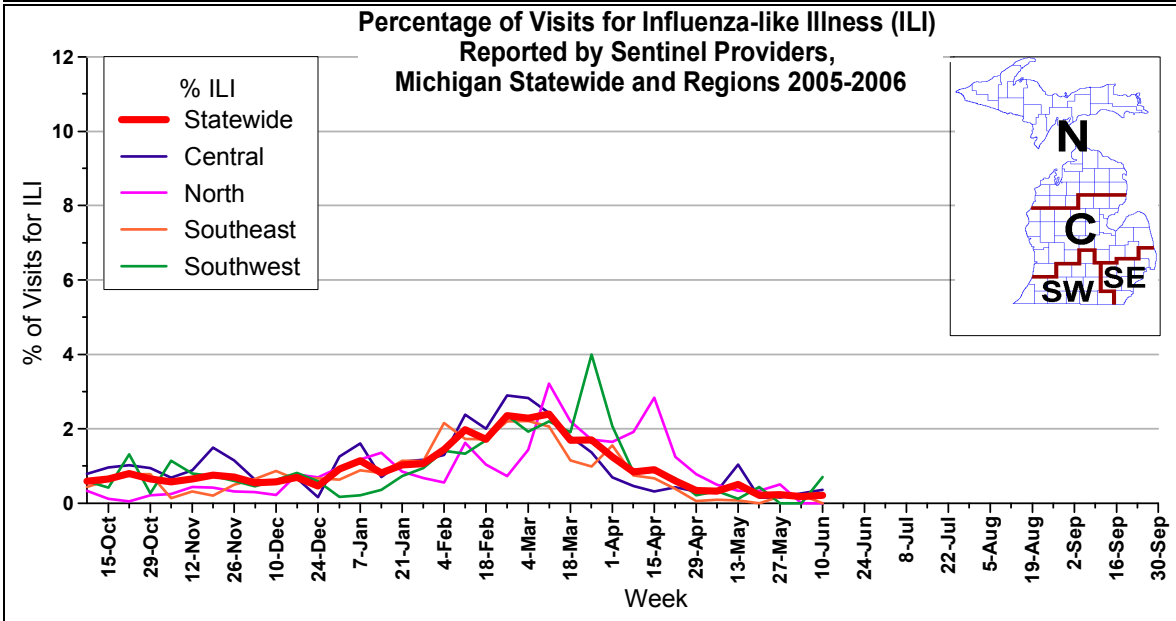
MIFluFocus
June 15, 2006
Weekly Influenza Surveillance and Avian Influenza Update

Michigan Disease Surveillance System: Flu-like illness activity, as reported in MDSS, has continued to decrease over the past week to a lower level than was reported from the same period in 2005.

Emergency Department Surveillance: Emergency department visits due to constitutional and respiratory complaints continued to show decreasing activity since last week. The current level of both indicators is lower than those reported from the same period last year. Over the past week, no statewide alerts were generated for either indicator.

Over-the-Counter Product Surveillance: The past week has demonstrated no overall increase in flu-like illness activity. With the exception of anti-fever product sales, which has shown a slight increase in trend, all recent product sales have either decreased or remained stable. Chest rub and thermometer sales continue to remain at higher levels than those reported from the same period last year; sales of all other indicators is comparable to or decreased from last year.

Sentinel Surveillance (as of June 15, 2006): During the week ending June 10, 2006, the proportion of visits due to influenza-like illness (ILI) was unchanged from last week at 0.2% of all visits, remaining lower than the rates reported at the beginning of the 2005-2006 season. Low levels of ILI activity were reported in all regions; the percentage of visits due to ILI by region was 0.3%, Central; 0.0%, North; 0.0%, Southeast; and 0.7%, Southwest.



Laboratory Surveillance (as of June 15, 2006): The MDCH laboratory has confirmed 138 influenza cases in Michigan over the 2005-2006 season, of which 132 were influenza A (H3N2) and 6 were influenza B. No additional positives were reported this week. Data from influenza sentinel laboratories is not currently available.

Influenza-Associated Pediatric Mortality (as of June 15, 2006, CDC data as of May 20): For the 2005-2006 influenza season, Michigan had one confirmed influenza-associated pediatric death from region 2S, with one other death under investigation at this time by MDCH. During October 2, 2005 – May 20, 2006, CDC received reports of 35 influenza-associated pediatric deaths, 33 of which occurred during the current influenza season.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes no only death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of June 15, 2006): No reports were received during the past reporting week.

A total of two congregate setting outbreaks have been reported to MDCH this season; one in Southwest Michigan in late February and one in Southeast Michigan in late March. Both outbreaks were MDCH laboratory confirmed as due to influenza A (H3N2).

National (June 16, 2006): The CDC has released its update on the 2005-2006 influenza season. In the United States, influenza A (H3N2) viruses predominated overall, but influenza B viruses were isolated more frequently than influenza A viruses late in the season. A small number of influenza A (H1N1) were isolated. The proportion of specimens testing positive for influenza first exceeded 10% during the week

ending December 24, 2005 (week 51), peaked at 23.0% during the week ending March 11, 2006 (week 10), and declined to <10% during the week ending April 29, 2006 (week 17). Peak percentage of specimens testing positive for influenza ranged from 23.2% to 41.0% during the preceding five influenza seasons, and the peak occurred during early December to late February. Influenza activity in the United States peaked in early March. The number of pneumonia and influenza deaths did not exceed the epidemic threshold and peaked twice, once during the week ending January 14, 2006 (week 2), and again during the week ending March 18, 2006 (week 11).

The 2005-06 influenza season was notable because of the emergence of a high level of resistance among circulating influenza A (H3N2) viruses to the antiviral adamantanes (i.e., amantadine and rimantadine). Of 209 influenza A (H3N2) virus isolates collected from 26 states and sent to CDC during October 1-December 31, 2005, a total of 193 (92.3%) were resistant to adamantanes. On the basis of these findings, in January 2006, CDC recommended against use of the adamantane class of antivirals for the treatment and prophylaxis of influenza in the United States until susceptibility to adamantanes has been reestablished among circulating influenza A isolates. A high level of resistance to adamantanes (>90%) by influenza A (H3N2) viruses continued to be observed among specimens tested through May 2006.

The Food and Drug Administration's Vaccines and Related Biological Products Advisory Committee has recommended that the 2006--07 trivalent influenza vaccine for the United States contain A/New Caledonia/20/99-like (H1N1), A/Wisconsin/67/2005-like (H3N2), and B/Malaysia/2506/2004-like viruses. This represents a change in the influenza A (H3N2) and influenza B components.

The Michigan 2005-06 Influenza Seasonal Summary will be published shortly. For the complete CDC 2005-06 Influenza Season Summary, see pgs. 648-653 of the MMWR for June 16, 2006. The Internet link is http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5523a2.htm?s_cid=mm5523a2_e.

International (WHO, as of June 14, and CDC, as of June 16): During weeks 20–22 (May 14-June 3), WHO reported that overall influenza activity declined further in northern hemisphere while it remained low in most parts of southern hemisphere, with the exception of South Africa. It is not clear whether the increase of activity in South Africa marks the start of the 2006 southern hemisphere influenza season.

According to the CDC, for the 2005-2006 season worldwide, influenza B viruses were the most commonly reported influenza type in Europe, influenza A (H1N1) and influenza B viruses predominated in Asia, and small numbers of influenza A and B viruses were reported in Africa.

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Weekly influenza activity reporting to the CDC is finished for the 2005-2006 influenza season.

End of Seasonal Report
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Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.
WHO Update (June 15, 2006): The Ministry of Health in Indonesia has confirmed the country's 50th

case of human infection with the H5N1 avian influenza virus. The case, which was fatal, occurred in a 7-year-old girl from Tangerang district, Banten Province. She developed symptoms on 26 May, was hospitalized on 30 May, and died on 1 June. Her 10-year-old brother died of respiratory disease on 29 May, but no specimens were taken for testing and the cause of his death cannot be determined. An investigation found a history of chicken deaths in the household and neighborhood prior to symptom onset. Laboratory testing of surviving family members and close contacts has been conducted and no further cases were found. Of the 50 cases confirmed to date in Indonesia, 38 have been fatal.

An interesting report on the age-related severity of H5N1 infection was made public this week. The work was conducted by scientists at the University of Hong Kong and will be published in the July issue of the Journal of Infectious Diseases. The study suggests that some avian influenza viruses, particularly H5N1, appear to prompt the human immune system to over-produce pathogen-fighting chemicals called chemokines. The chemokines then trigger an exaggerated response that creates more damage than it fixes. When comparing the effects of H9N2 and H5N1 avian influenza viruses on adult vs. neonatal blood, the scientists found that significantly more chemokines were produced in the adult blood, even though the virus replicated at the same rate in both blood types. A human H1N1 virus did not produced the same result, suggesting that this effect may be unique to avian influenza viruses. In addition, the team also found elevated chemokine levels in patients who died from H5N1 infections when compared to those who were infected but survived. The findings could help to explain why the 1997 Hong Kong outbreak of H5N1 was far more deadly for adults than children and why the infamous 1918 Spanish flu, caused by the H1N1 subtype, had its greatest effects on young adults. Please reference: Zhou, Jianfang, et al. "Differential Expression of Chemokines and Their Receptors in Adult and Neonatal Macrophages Infected with Human or Avian Influenza Viruses." The Journal of Infectious Diseases 194:1 (July 1, 2006).

National Wild Bird Surveillance (June 9, 2006): In an article by Associated Press writer Ann Sutton, a spokesperson for the Department of the Interior states that more than 4000 wild birds, mostly from subsistence hunting, have been collected in Alaska for H5N1 avian influenza virus testing. The National Wildlife Health Center in Madison, Wisconsin has tested almost half of those birds, which have all tested negative. U.S. Department of Agriculture spokeswoman Gail Keirn said that almost 700 additional samples collected by the department have tested negative at the National Wildlife Research Center in Fort Collins, Colorado and at various USDA-certified veterinary laboratories around the country. The goal is to sample 19,000 live and hunter-killed birds this year in Alaska. Please reference: Sutton, Ann. "Bird flu samples test negative, so far" Santa Barbara News-Press 9 June 2006.

Michigan Wild Bird Surveillance: To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at http://www.michigan.gov/emergingdiseases

Surveillance questions: Rachel Potter at PotterR1@michigan.gov

Office Planning for 2006-2007

Below (and attached to this email) is a time line for planning flu vaccine in the private providers office. It is geared for the 6 mos to 23 mos population. You may find it helpful to establish a timeline for provider offices. Based on the information in the slide and adapting it to all ages groups involved, you can schedule when to giving information out to patients/client, when to schedule vaccination, and when to give shots assuming supply is adequate.

Courtesy of Pat White, Oakland County

Influenza Vaccines 2006-2007: An excel chart is attached to this email and outlines all the flu vaccine presentations for the upcoming season. (*thanks Jan for the suggestion*!)

FluBytes is distributed to MDCH flu partners for informational purposes and may be .

For questions on FluBytes, please contact Liz Harton, Public Health Advisor at hartone@michigan.gov

This newsletter is distributed to local health departments, Immunization Action Plan (IAP) Coordinators, members of the Michigan Advisory Committee on Immunizations (MACI), Alliance for Immunization in Michigan (AIM), and representatives of the Flu Advisory Board (FAB).

Age @ Appt.	Month of Appt.							
	April	May	June	July	Aug	Sept	Oct	Nov
o				Info	Info	Info		
o				Info	Info	Info		
o				Info	Info	Appt	Shot	Shot
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